1			CITY OF SANTA FE, NEW MEXICO
2			ORDINANCE NO. 2002- <u>20</u>
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5			AN ORDINANCE
6	REPEALING	G SECT	ΓΙΟΝ 14-8.2 SFCC 1987 AND CREATING A NEW SECTION 14-8.2
7	SFCC 1987	RELAT	TING TO TERRAIN AND STORMWATER MANAGEMENT
8	REGULATI	ONS A	ND AMENDING ALL APPROPRIATE SECTIONS OF CHAPTER 14
9	SFCC 1987 1	N REI	LATION TO SUCH SECTION.
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11	BE IT ORDA	AINED	BY THE GOVERNING BODY OF THE CITY OF SANTA FE:
12	Section	on 1.	REPEAL Section 14-8.2 SFCC 1987 (being ordained as Ordinance
13	No. 2001-38) is rep	ealed.
14	Section	on 2.	A new Section 14-8.2 SFCC 1987 is ordained to read:
15	14-8.	2	[NEW MATERIAL] TERRAIN AND STORMWATER
16	MANAGEM	ENT.	
17	(A)	Purp	ose
18		The p	purpose of these regulations is to protect, maintain and enhance the health,
19		safety	y, and general welfare of the citizens and natural environment of the City.
20		The f	following considerations shall be used during the design and planning
21		proce	ess for all proposed developments subject to these regulations:
22		(1)	Ensure sound and orderly development of the natural terrain;
23		(2)	Protect life and property from the dangers of flooding and the hazard of
24			improper cuts and fills;
25		(3)	Minimize erosion and sedimentation;

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	(4)	Minimize destruction of the natural landscape;
2	(5)	Protect the scenic character of Santa Fe from the visual blight of
3		indiscriminate cuts and fills and vegetation removal resulting from
4		extensive grading, and utility scars;
5	(6)	Treat stormwater runoff as a valuable natural resource in Santa Fe, a
6		community that is prone to drought, by encouraging water collection and
7		infiltration on site;
8	(7)	Control the adverse impacts associated with accelerated stormwater
9		runoff on natural drainage ways and all structures due to increased
10		development and impervious surfaces;
11	(8)	Minimize erosion and degradation of arroyo channels and improve the
12		condition of the channel where possible;
13	(9)	Respect, protect, maintain, and restore natural drainage ways, wetlands,
14		bosques, floodplains, steep slopes, riparian vegetation, and wildlife
15		habitat areas;
16	(10)	Prevent stormwater runoff from damaging acequias or other irrigation
17		facilities;
18	(11)	Integrate stormwater management measures into the landscape and site
19		planning process as set forth in section 14-8.4; and
20	(12)	Provide aesthetically pleasing solutions to stormwater management and
21		erosion control measures by integrating measures into the overall
22		landscape and site design.
23	(B) Applic	eability
24	(1)	Minimum standards and submittal requirements for terrain and
25		stormwater management are based on the type of project, as follows:

1		(a,	Gradin	ag permit applications, when required by § 14-3.10(E),
2			shall n	neet the minimum standards and submittal requirements in
3			§14-8.	2(D);
4		(b)	Buildi	ng permit applications shall meet the minimum standards
5			and su	bmittal requirements in:
6			(i)	§14-8.2(E);
7			(ii)	§ 14-8.2(F);
8			(iii)	If all terrain and stormwater management requirements
9				have been met at the final development plan or
10				subdivision plat stage, the approved final terrain and
11				stormwater plans shall be submitted with the application
12				for building permit and no further submittals shall be
13				required;
14		(c)	Maste	r plan, preliminary development plan and preliminary
15			subdiv	vision plat applications shall meet the minimum standards
16			and su	bmittalrequirements in § 14-8.2(G);
17		(d)	Final o	development plan and subdivision plat applications shall
18			meet t	he requirements in §14-8.2(H); and
19		(e)	All Ci	ty departments which implement construction projects
20			shall c	comply with the objectives, intent, and minimum standards
21			of this	section.
22	(2)	Exem	ptions	
23		New c	onstruct	ion, remodeling, additions, or other alterations to existing
24		structu	ires are	exempt from the requirements of this section provided that
25		they m	neet the	following conditions:

1			(a)	Less than 1000 square feet of total land area is disturbed;
2			(b)	No slopes greater than 10% are disturbed; and
3			(c)	Existing drainage patterns on the property are not changed in a
4				way that would increase the amount of stormwater runoff
5				leaving the property.
6		(3)	Varia	nces.
7			Varian	ces to these regulations shall be pursuant to § 14-87.
8		(4)	Altern	ative Compliance.
9			Applic	ants may propose alternatives to standard stormwater management
10			techniq	ques, so long as these alternatives allow the project to meet the
11			minim	um standards and general requirements of this section. Alternative
12			technic	ques may be proposed that achieve improved environmental
13			perform	nance, including reduced stormwater runoff, increased infiltration,
14			reduce	d sedimentation and erosion, and for aesthetic purposes. Proposals
15			for alte	ernative compliance to standard stormwater management
16			technic	ques shall be subject to review and approval of the City Engineer
17			in writ	ing, stating the basis for such a waiver.
18	(C)	Proced	lures an	nd General Requirements
19		(1)	All pro	posed development shall meet the purpose listed in §14-8.2(A).
20		(2)	The Ci	ty Engineer shall be authorized to determine the following:
21			(a)	The completeness of all required terrain and stormwater
22				management submittals;
23			(b)	Compliance with all minimum standards;
24			(c)	the acceptability of all proposed erosion control and stormwater
5				management methods: and

1	(4	4)	The ne	ed for additional information or written approval in order
2			to deter	rmine compliance with the purposes, intent, and minimum
3			standar	ds of this section.
4	(3)	The pre	paratio	n of submittals shall be as follows:
5	3)	1)	Buildin	ng Permits for Minor Development
6			Submit	tals may be prepared by any individual, including the
7			homeov	wner, however, the City Engineer may require that
8			submitt	als be prepared and signed by a New Mexico professional
9			enginee	er, architect, or landscape architect if it is deemed
10			necessa	ary in order to fulfill the requirements of this section;
11	(1)))	Gradin	ng Permits
12			Submit	tals shall be prepared and certified by a New Mexico
13			professi	ional engineer or a landscape architect or architect
14			register	ed in New Mexico; and
15	(0	:)	Buildin	g Permits for All Other Development
16			(i)	Topographic Plans.
17				Submittals shall be prepared and certified by a New
18				Mexico professional engineer or a land surveyor licensec
19				in New Mexico.
20			(ii)	StormwaterManagement
21				Submittals for master plans, subdivisions and
22				development plans shall be prepared and certified by a
23				New Mexico professional engineer. Submittals for all
24				other building permits shall be prepared by a New
25				Mexico professional engineer or an architect or

1			landscape architect registered in New Mexico;
2			(iii) Site Restoration.
3			Submittals shall be prepared and certified by a landscape
4			architect or architect registered in New Mexico or a New
5			Mexico professional engineer.
6		(4)	No certificate of occupancy or any type of final construction approval
7			shall be issued by the City unless a parcel is in full compliance with the
8			requirements of this section and all inspections have been conducted as
9			described in §14-8.2(1).
10		(5)	Activities permitted by this section may also require notification or
11			permitting by other agencies, including but not limited to written
12			approval from the Acequia Madre de Santa Fe Community Acequia
13			Association or other official watercourse related organization, the federal
14			environmental protection agency, the United States army corps of
15			engineers, the Federal Emergency Management Agency (FEMA) and the
16			New Mexico Environment Department. It is the responsibility of each
17			applicant to determine whether additional notification or permitting is
18			required.
19	(D)	Gradi	ing Permits
20		(1)	Minimum Standards
21			When a grading permit is required by §14-8.A Grading Permits
22			Required, applications for the permit shall show compliance with the
23			following minimum standards:
24			(a) Cut and Fill Slopes
25			(i) Cut slopes on a site shall not exceed ten feet in height. In

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no case shall the height of a cut exceed the height of the building;

- (ii) Fill slopes on a site shall not exceed 15 feet in height.

 Retaining walls for fill slopes shall be no greater than ten feet in height. However, in the escarpment overlay district retaining walls shall be no greater than five feet in height, and in the case of cement, shall be a matching earth tone color. Unstabilized fill slopes shall be no steeper than 3:1, unless a structural alternative such as a retaining wall or some other measure acceptable to the City Engineer is provided;
- (iii) Cut or fill slopes for roads shall not exceed 15 feet in height; and
- or some other measure acceptable to the City Engineer, shall be no steeper than 2:1 (2 horizontal to 1 vertical), unless a structural alternative is provided or unless it can be demonstrated by the geotechnical study that existing soils will naturally accommodate a steeper slope and acceptable revegetation or other erosion control can be achieved;

(b) Grading

 (i) Grading on building sites is limited to 15 feet beyond the outer edge of the building foundation, patio, wall, driveway, road, parking area, or other constructed

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facility except:

- A. As necessary for the construction of stormwater runoff management measures in compliance with this section; or
- B. As necessary to accommodate required horizontal to vertical measurements for cut and fill slopes.
- (ii) Private driveways shall not exceed a grade of 15% nor shall the inside-turning radius of any private driveway be less than 15 feet.
- Natural slopes greater than 30% shall remain (iii) undisturbed, except for isolated occurrences such as arroyo crossings and other sloped areas where the disturbance shall not exceed 1,000 square feet in total, as approved by a City Engineer. The City Engineer may waive this provision, in writing, stating the reasons and basis for such approval, if evidence is provided by the applicant showing that strict enforcement of this provision would prohibit access to the lot or placement of utilities. This provision shall apply solely to the construction of roads, driveways, and utility placement and **is** not intended to permit development on natural slopes exceeding 30%. The other provisions of the escarpment overlay district ordinance and the terrain and stormwater management regulations shall remain in

1			effect;
2	(i	iv)	Where the volume of earth to be moved on a site exceeds
3			1,000 cubic yards, a soil engineering report prepared by
4			a New Mexico professional engineer shall be submitted
5			and approved. A soil engineering report shall include
6			the soil type, classification, permeability, erosion
7			potential, and any other pertinent soil information
8			requested by the City Engineer;
9	7)	v)	Phasing for grading and clearing may be required by the
10			City Engineer on all sites where construction will not
11			begin immediately after clearing and grading;
12	(\)	vi)	No grading permit for driveway construction shall be
13			issued unless the City Engineer has first determined that
14			a buildable area as defined in §14-8.2(F)(2)(b) exists on
15			the lot. In the escarpment overlay district, a grading
16			permit for driveway construction shall be issued only for
17			access to the buildable area farthest from the view line;
18			and
19	(V	vii)	All grading completed on the site shall be in
20			conformance to the approved grading plan.
21	(e) S	Site Re	estoration
22	A	All dev	relopment subject to a grading permit shall be required to
23	m	neet th	e requirements of §14-8.2(F)(2)(d) as appropriate for the
24	p	roject;	;
25	(d) B	Best M	anagement Practices

The following best management practices shall be used before and during the construction process:

- (i) Disturbed areas shall be protected from erosion during construction by diverting stormwater around the disturbed area, energy dissipation of stormwater adequate to prevent erosion, retention of sediment on the disturbed area, and/or other means adequate to retain soil on site;
- (ii) Except as necessary to install temporary erosion and sediment control devices, land shall not be graded or cleared of vegetation until all such temporary devices have been properly installed and inspected. Temporary erosion and sediment control devices may include silt fencing, swales, straw bales, berms, geotextilessediment basins or traps, fencing. Control devices shall be kept in place and used until the disturbed area is permanently stabilized;
- (iii) Significant trees, areas with substantial grass coverage, and drainage ways that are to remain undisturbed shall be fenced off prior to the use of any heavy machinery on-site and shall remain fenced during the entire construction process. Fencing material may include snow fencing, plastic mesh or other similar fencing material. To protect the root zone of significant trees, fencing shall be placed 5 feet to the outside of the

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- (iv) To prevent soil from leaving a site, soil stockpiles shall be protected from wind and water erosion throughout the construction process by using appropriate erosion control techniques. Staging and soil stockpile areas shall be clearly designated on the site. All topsoil shall be kept on site, within the disturbance zone of a construction site, and then reintroduced into planting areas to the extent possible. Stockpiled soil shall not be allowed to enter arroyos or other drainage ways;
- (v) Techniques to prevent the blowing of dust or sediment from the site, such as watering down exposed areas, are required for projects which disturb greater than 5,000 square feet; and
- (vi) Protection for storm drain inlets shall be provided, if needed, to prevent the entry of sediment from the site while still allowing the entry of stormwater.

(2) **Submittals**

Applications for grading permits shall include:

- (a) A topographic survey and grading plan with elevation contours shown at not more than two foot intervals on slopes up to 30% and five foot intervals on slopes greater than 30% which shows:
 - (i) All areas with slopes 0 20%; 21 30%; and 3 1% and greater, differentiated through shading, tone, color, or line weight;

1		(11)	All areas to be graded on the site and the final contours
2			to be achieved by the grading;
3		(iii)	All finished floor or grade elevations;
4		(iv)	Spot elevations, as needed;
5		(v)	Areas of soils with severe limitations for the intended
6			use;
7		(vi)	The location of temporary erosion control structures and
8			methods used, including staging and stockpile areas;
9		(vii)	All significant trees and areas with substantial grass
10			coverage to be removed;
11		(viii)	A construction schedule when the project will be
12			developed in phases;
13		(ix)	The location of fencing around the areas to be protected
14		(x)	The ratio of horizontal to vertical measurement for cut
15			and fill slopes;
16		(xi)	The total volume, in cubic yards, of earth to be moved;
17			all existing disturbed areas; and
18		(xii)	FEMA flood hazard areas.
19	(b)	For all	roads or other excavations where the volume of earth to
20		be mov	ved exceeds 1,000 cubic yards, cross-sections or contour
21		maps s	howing the height of cuts and fills at a maximum of 100
22		foot in	tervals and at any major breaks in the terrain may be
23		require	ed by the City Engineer.
24	(E) Building	Permits for 1	Minor Development
?5	(1) M	linor Develo	pment

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A minor development includes the construction of any structure including but not limited to single family residences, additions, sheds, garages, driveways, or pavement that meets all of the following criteria:

- (a) All development takes place on a single lot or a subdivision of less than three lots;
- (b) Development disturbs less than 5,000-square feet of land per lot;
- (c) Development disturbs no slope greater than 10%; and
- (d) No more than 3,500-square feet of new impervious surface is created per lot.

(2) Minimum Standards

Minor development shall comply with the following minimum standards:

- (a) The minimum volume of water to be contained or infiltrated on site shall be determined by multiplying the total area of new impervious surface, in square feet, by 0.16 feet to arrive at a value expressed in cubic feet. [i.e. 160 cubic feet of water containment is required per 1000 square feet of impervious surface.] Compliance may be achieved by:
 - (i) The use of active or passive water harvesting techniques such as cisterns, swales, berms, and check dams;
 - (ii) The construction of a detention or retention basin; or
 - (iii) A combination of (i) and (ii).
- (b) All water containment structures, which have water open to the air, shall empty within 24 hours either through percolation into the soil or through outlet structures designed to ensure a controlled release of water that will not cause flooding or

erosion:

(c) To protect against erosion, all land disturbed during construction shall be revegetated with drought tolerant vegetation. Trees and shrubs shall be irrigated until established. The use of naturally degrading erosion control blankets or other erosion control materials is encouraged to ensure that grasses become established. Stones or treated landscape timber may be used to stabilize disturbed areas in lieu of revegetation.

(3) Submittals

Building permit applications for minor development shall include-

- (a) A brief narrative description of the proposed project;
- (b) A topographic map of the property to scale, including United

 States geological survey quadrangle maps or maps generated by
 the City of Santa Fe, adequate to show elevation contours,
 natural drainage ways, existing and proposed improvements;
- (c) A brief verbal description and/or representative photographs of the type (such as, pinon and juniper trees, annual weeds, grass cover, bare ground, and so on) and approximate coverage of existing vegetation at the site, and a plan for vegetation removal at the site;
- (d) A description of all proposed grading or ground disturbance;
- (e) Calculations and a plan drawing showing:
 - (i) The size and location of all proposed runoff containment structures or methods and how water will be directed to the structures or methods; and

1			(ii)	Percolation test results or other means of demonstrating
2				that containment structures will empty within 24 hours.
3		(f)	A roof	run-off drainage plan; and
4		(g)	A plan	ting plan for revegetation showing proposed plant
5			materi	als and a description of the proposed impation method or
6			other r	methods used to establish vegetation and prevent erosion
7			until v	egetation becomes established.
8	(F) Buildin	ng Pern	nits For	All Other Development
9	(1)	All Ot	her Dev	relopment
10		All oth	ner devel	opment that requires a building permit and does not meet
11		the req	uiremer	nts of §14-8.2(E) shall meet the following minimum
12		standa	rds and s	submittal requirements:
13	(2)	Minim	num Sta	ndards
14		(a)	All pro	pjects shall meet the minimum standards for grading in
15			§14-8	2(D).
16		(b)	То	ppography
17			(i)	Each lot shall have an area designated as suitable for
18				building of not less 2,000 square feet, which can be
19				developed in accordance with the terrain and stormwater
20				management standards and minimum performance
21				standards;
22			(ii)	One-half of the area designated as suitable for building
23				and designated for the building footprint shall have a
24				natural slope of 20% or less. The other one-half of the
2.5				area may have a natural slope between 20% and 30%;

1		(iii)	For a s	tructure built on a natural slope over 20%, the
2			finishe	d floor elevation at any point shall not exceed five
3			vertica	l feet above the natural grade at that point; and
4		(iv)	No stru	acture may be built on a natural slope of over 30%
5			unless	as specified in 514-90.4 (A).
6	(c)	Storn	nwater I	Management
7		(i)	Genera	al Standards
8			A.	Stormwater management measures shall be
9				selected to best accommodate the specific
10				geologic, hydrologic, and topographic features
11				of the land to be developed;
12			В.	Stormwater management measures shall be
13				designed as both a comprehensive and integral
14				part of the development;
15			C.	Stormwater management measures shall be
16				designed to directly address additional flows
17				from the proposed development. Compliance
18				with these standards shall not be achieved solely
19				by alterations to flows upstream of a proposed
20				development; and
21			D.	Stormwater management plans may be designeu
22				to incorporate measures that are shared by two
23				or more developments provided that the
24				measures comply with the minimum standards
25				of this section.

(ii) **Discharge Standards**

- A. Except as required for certain development in § 14-8.2(G)(l)(c), the stormwater runoff peak flow rate discharged from a site shall not exceed pre-development conditions for any frequency storm event up to the 100-year,24-hour storm event at each discharge point. Calculation of the runoff peak flow rate may approximate the event from available data;
- B. Runoff control measures may include, but are not limited to, the use of detention or retention basins and active and passive water harvesting techniques including swales, berms, cisterns, check dams, vegetative ground cover, and other techniques appropriate for retaining and infiltrating water on-site;
- C. No stormwater shall be discharged into any watercourse or drainage channel without adequate reduction of flow velocity. This shall be accomplished by erosion control techniques that may include the routing or energy dissipation of stormwater runoff to a vegetated swale, vegetated basin, or stone-protected area. The techniques used shall be sufficient to diminish runoff velocity and spread runoff flow

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adequately to avoid erosion upon entering the watercourse;

- D. No stornwater runoff shall be routed into imgation ditches, canals, acequias or watercourses related to an acequia system unless specific plans have been approved in writing by the person or entity legally responsible for the operation and maintenance of the facility and the City Engineer. It shall be the responsibility of the developer to obtain all such approvals before submittal of any application;
- E. No existing acequia, watercourse or other natural drainage system not related to an existing or historic acequia system, whether on-site or off-site, shall be disturbed by any on-site building development or construction activity unless the City Engineer approves the change to the watercourse or other natural drainage system; and
- F. No active, historic acequia, whether on-site or offsite, shall be disturbed in any way by on-site
 building development or construction activity
 unless specific plans have been approved in
 writing by the person or entity legally responsible
 for the operation and maintenance of the acequias.

It shall be the responsibility of the developer to obtain all such approvals before submittal of any application.

(iii) Basin Standards

- A. Stormwater detention basins and overflow structures shall be sized and designed to adequately accommodate flows from 100-year, 24-hour storm events. However, such basins shall also be equipped with outflow structures that limit flow-through from lesser magnitude storms to runoff rates equal to or less than predevelopment runoff rates. Calculations may be approximated from available data;
- B. Infiltration, detention, and retention basins shall provide a means of controlling and removing sediment. Methods may include sedimentation settling ponds, sediment traps, filters on drop inlets, or other methods. All basins shall be designed to empty within no more than 24 hours;
- C. French drains, infiltration basins or other similar structures used for the percolation of water into the soil, shall not be constructed so that their depth is greater than its widest horizontal dimension unless a notice of intent for the

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- construction is filed with the New Mexico
 Environment Department; and
- D. Landscape treatment of infiltration, retention, and detention basins is required and shall be in accordance with the §14-8.4(F) and 14-8.4(E).

(iv) Arroyo, Stream and Watercourse Standards

- A. For arroyos, streams, or watercourses that carry 100 cubic feet per second or more of stormwater flow in a 100-year, 24-hour storm event, all structures, paved roads, driveways, and parking lots shall be set back a minimum of 25 feet from the top shoulder of an arroyo plus the depth of the arroyo channel. This setback provision does not apply to stormwater management structures or public access trails;
- B. Except for erosion control measures, stormwater management measures, public access trails, or the placement of underground utilities required for development, no grading shall occur within the setback area;
- C. Where practical, erosion control and channel stability in arroyos, streams, or watercourses shall be achieved using techniques that reduce stormwater velocity, preserve active floodplains, provide adequate room for floodwaters to spread

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safely, and utilize native vegetation. Arroyo and watercourse banks shall not be armored with concrete, gabion baskets, sheet piling, rip-rap, or similar hardened material unless no reasonable alternative exists to protect public infrastructure or preexisting structures; and

 Fences, walls, and similar structures may not be constructed in or across any arroyo, stream, or watercourse.

(d) Site Restoration

- land disturbed by construction shall be completed within 21 calendar days after completion of construction or other activities on site that would interfere with such soil stabilization measures. If the time of year is not conducive to planting, then planting may be delayed until the next appropriate planting season provided that all appropriate temporary erosion control measures are maintained until permanent erosion control measures are implemented;
- (ii) One or more of the following stabilization and erosion control measures shall be used:
 - A. Revegetation with appropriate drought-tolerant plant materials, including grasses or other ground cover;

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- B. Restoration with bioengineering techniques such as live staking, brush layering, brush mattress, live crib walls; or
 Stabilization with stones, terracing, or similar techniques.
- (iii) All trees and shrubs shall be mulched and irrigated until established. It is recommended that grass seed either be

 1) hydroseeded; or 2) covered with biodegradable material or synthetic soil erosion control blankets or matting and irrigated until established. Irrigation shall be pursuant to the irrigation requirements in §14-8.4(E).

(e) Increase in Minimum Standards

- (i) The City Engineer may require implementation of more than the minimum stormwater standards if arroyos onsite or immediately downstream of a site show evidence of increased flooding, channel erosion or sedimentation, as a direct result of conditions on the site. Increased requirements shall be limited to the following on-site measures:
 - A. Erosion control measures extended to a broader area of the site than the development area;
 - B. Revegetation of highly eroded areas;
 - C. Arroyo restoration or other erosion control
 measures within highly eroded channels; or
 - D. A combination of the above measures.

Ι	(3)	Subr	nittals		
2		Subm	Submittals for building permit applications for all other development		
3		shall	include:		
4		(a)	The su	abmittals for grading listed in §14-8.2(D).	
5		(b)	Topog	raphy plan which includes:	
6			(i)	All sloped areas of 0 - 20%, 21 - 30%, and greater than	
7				30% shall be clearly marked and differentiated by shade	
8				tone, or color at the same scale required for preliminary	
9				subdivision plat;	
10			(ii)	Ground elevations which conform to either the United	
11				States geological survey sea level datum, as modified, or	
12				to the City of Santa Fe's monument system, showing	
13				elevation contours at not more than two foot intervals on	
14				slopes up to 30% and not more than five foot intervals	
15				on slopes greater than 30%;	
16			(iii)	The designated building lot area(s); and	
17			(iv)	Date, method of survey, and certification from a New	
18				Mexico professional engineer or professional land	
19				surveyor that the plan is in compliance with national	
20				map accuracy standards.	
21		(c)	Storm	water management plan which includes:	
22			(i)	A vicinity map;	
23			(ii)	Existing and proposed contours, all watercourses,	
24				arroyos, drainage ways, impoundments, and wetlands on	
25				or adjacent to the site or into which stormwater from the	

1			site flows;
2	(iii))	Location of all existing and proposed improvements
3			including buildings, structures, impervious surface,
4			stormwater management measures, roads, and utilities;
5	(iv))	Location of all easements and rights-of-way;
6	(v)		The delineation, if applicable, of the 100-year
7			floodplain, including the flood fringe and floodway, if
8			available, and any on-site or adjacent wetlands;
9	(vi))	Description of all soils, including general soil
10			characteristics and areas of solid rock;
11	(vii	i)	Percolation test results for all areas with retention ponds
12			or other facilities designed for infiltration and a
13			description of techniques to be used to prevent the
14			clogging of soil pores by fine sediment;
15	(vii	ii)	A description of the approximate area of the watershed
16			above the site, including the vegetative coverage and
17			impervious surfaces;
18	(ix))	The total peak flow rate of stormwater that would be
19			discharged from the site for pre-development and post-
20			development runoff conditions in the two, ten, 50, and
21			100-year, 24-hour storm event and type of calculation
22			method used;
23	(x)		Sizing, volume, and peak flow rate calculations in cubic
24			feet per second for stormwater management facilities;
25	(xi))	Structural and construction details for all components or

1						the proposed dramage system;
2					(xii)	Data for total site area, disturbed area, new impervious
3						area, and total impervious area; and
4					(xiii)	A plant schedule of materials to be used as landscape
5						treatment for stormwater management measures;
6				(d)	Sitere	storation plan which includes the location of all permanen
7					erosio	n control methods, including location, type and amount of
8					plant a	nd seed material to be used, proposed irrigation, any soil
9					stabili	zationneeded prior to plant establishment, time schedule
10					for ins	tallation, and maintenance schedule for one year beyond
11					the pla	nting date.
12		(G)	Maste	er Plans	, Prelim	inary Development Plans and Preliminary Subdivision
13	Plats					
14			(1)	Minin	num sta	ndards
15				(a)	Projec	ts shall meet the minimum standards of §§14-8.2(D) and
16					14-8.2	(F);
17				(b)	All lar	nd below the base flood elevation for a 100-year, 24-hour
18					storm	event shall be dedicated as public open space, drainage
19					easem	ent and public right of way depending on the nature of the
20					develo	pment and the hydrology of the area to prevent
2.1						
21					infring	ement to the hydrologic floodplain. Under no
						ement to the hydrologic floodplain. Under no
22					circum	
22 23					circum	astances shall pedestrian or other public easements or open dedications be precluded for purely non-hydrologic
2122232425				(c)	circum space (astances shall pedestrian or other public easements or open dedications be precluded for purely non-hydrologic

1		the subdivision exceeds 20% slope, the quantity and peak flow
2		rate of post-development stormwater runoff on all developed or
3		disturbed land shall not exceed 75% of the quantity and peak
4		flow rate of the pre-development runoff.
5	(2) Sub	mittals. Submittals for master plans, preliminary development plans
6	and	subdivision plats shall include:
7	(a)	A conceptual plan and report that shows the general approach
8		proposed for terrain and stormwater management, and how the
9		proposed development will meet all of the minimum standards
10		described in §§14-8.2(D) and 14-8.2(F);
11	(b)	A topography plan as outlined in §14-8.2(F)(3); and
12	(c)	A brief description of the watershed directly upstream and
13		downstream of the parcel, including the size, terrain, type and
14		extent of vegetation cover, and degree of development for all
15		areas draining to the project site; and
16	(d)	A water availability and conservation plan shall be submitted for
17		all new subdivisions of 15 or more dwelling units which are
18		sited, in whole or in part, on natural sloped areas greater than
19		20%.
20	(H) Final Deve	lopment Plans and Subdivision Plats
21	(1) Min	imum standards. Final development plans and subdivision plats shall
22	mee	t the minimum standards described in §§14-8.2(D), 14-8.2(F), and
23	14-8	3.2(G).
24	(2) Sub	mittals. Submittals for final development plans and subdivision plats
5	shal	l include:

1		(a)	All su	bmittals required in §§14-8.2(D) and 14-8.2(F);
2		(b)	A long	g-term maintenance schedule for the life of the stormwater
3			manag	gement measures including the time frame for completion
4			and the	e responsible party who shall perform the maintenance;
5			and	
6		(c)	An as-	built certification signature block to be executed by a New
7			Mexic	co professional engineer after the project completion to
8			ensure	e that the constructed stormwater management systems
9			compl	y with the approved stormwater plans.
10	(I) Inspec	tions ar	nd Viola	ntions During Construction Process
11	(1)	Inspec	ctions	
12		(a)	For all	l non-residential projects and all residential projects that do
13			not qu	alify as minor development, an applicant shall notify the
14			City to	set up a City inspection at the following times:
15			(i)	When the temporary best management practices are
16				completed;
17			(ii)	When final stormwater management measures are
18				completed; and
19			(iii)	When the final site restoration measures are completed,
20				however, if final site restoration measures are being
21				delayed due to the season, the applicant shall notify the
22				City when temporary erosion control measures, for use
23				until site restoration is complete, in place and ready for
24				inspection; and
25			(iv)	Further construction or issuance of any permits shall not

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occur until written approval has been granted by the inspector after each inspection that the best management practices and stormwater management control methods have been completed in accordance with approved plans;

- (b) The City Engineer or code enforcement officer may enter upon any properly subject to this section at reasonable times to conduct inspections of grading, erosion and stormwater management measures to determine compliance with City policies and procedures and to carry out duties in the enforcement of this section; and
- (c) The applicant shall perform regular inspections of all grading, erosion control, and stormwater management measures. All inspections shall be documented in written form and shall be made available to the City Engineer or code enforcement officer upon request.

(2) Violations

Any violation of this section shall be subject to the provisions of §§ 14-11.5(A) and 14-11.543).

(J) Dedications, Easements and Right-of-Ways

(1) All land below the base flood elevation for a 100-year, 24-hour storm event shall be dedicated to the City as public open space, drainage easement and public right-of-way depending on the nature of the development and the hydrology of the area. Under no circumstances shall pedestrian or other public easements or open space be precluded for purely non-hydrologic reasons.

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- (2) Irrevocable dedications to the City may be required by the City Engineer for the components of the stormwater drainage system including access for maintenance. The types of all easements and open space dedications shall be determined by the City Engineer. If a dedication is required, it shall be designated on the plan or plat and in effect prior to building permit approval.
- drainage system to the City, however, the City is not obligated to accept a dedication offer. Only the Planning Commission or the Governing Body, whichever is the appropriate body hearing the matter, may accept dedications to the City. If a dedication is offered to and accepted by the City, it shall be designated on the plan or plat and in effect prior to building permit approval.

(K) Long Term Maintenance Responsibilities and Inspections

(1) **Responsibilities**

All stormwater management measures and facilities shall be maintained by the fee simple owner of the property or a homeowners association, unless a dedication of the stormwater management system has been required or accepted by the City, in which case, the City shall be responsible for maintenance. For developments of 15 or more dwelling units, developers shall provide liability and property damage insurance, in a form approved in writing by the City Attorney, in order to protect adjacent property owners from failure of drainage or erosion control structures which were required for the development. For new developments of fifteen or more dwelling units, performance bonds or

their equivalent shall be posted by the developer for 10 years and thereafter, shall be renewed by the neighborhood or responsible association for maintaining all common drainage structures. Failure to renew the bond in a timely manner on an annual basis shall be grounds for the City Attorney's office to call the bond. The bond must be in an amount sufficient to defray maintenance costs for 10 years. The stormwater management system shall be maintained in good condition and promptly repaired. Maintenance shall include the repair and restoration of all grade surfaces, walls, swales, drains, darns, ponds, basins, site restoration measures, associated vegetation, and any other stormwater measure constructed on site. Such maintenance shall be in accordance with approved stormwater management plans.

(2) City Inspections

The City or its authorized agent may enter upon a property, which is subject to this section, at reasonable times to access the stormwater management system to ensure that the system is maintained in proper working condition to meet the approved stormwater management plans and the objectives and minimum standards of this section.

(3) Maintenance Violations

If after notice by the City to correct a violation requiring maintenance work, satisfactory corrections are not made by the owner(s) or responsible party within a reasonable period of time, the City may perform all necessary work to place the facility in proper working condition. The owner(s) or responsible party of the facility shall be assessed the associated costs of the work.

1	PASSED, APPROVED and ADOPTED this grant day Lay, 2002.
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3	Jany a. Seljado
4	LARRY A. DELGADO, MAYOR
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6	ATTEST:
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8	yelanda y . ng
9	YOLANDA Y. VIGIL, CITY CLERK
10	
11	APPROVED AS TO FORM:
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13 \$	Jon Songe
14	BRUCE THOMPSON, CITY ATTORNEY
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